CLAIMS

What is claimed is:

1. A method of detecting an antigen proximally associated with a test surface, comprising:

providing a roller surface, wherein the roller surface further comprises a binding agent that specifically binds at least part of the antigen;

contacting at least part of the test surface with at least part of the roller surface such that the binding agent binds the antigen to form a bound antigen; and

detecting the bound antigen on the roller surface.

2. The method of claim 1 wherein the step of contacting comprises repeatedly contacting the at least part of the test surface with the at least part of the roller surface.

3. The method of claim 1 wherein the test surface is selected from the group consisting of a skin, a meat for consumption, and a mucous membrane.

4. The method of claim 1 wherein the test surface is selected from the group consisting of a counter top, a door handle, a toilet seat, and a tile.

5. The method of claim 1 wherein the roller surface has a cylindrical configuration.

6. The method of claim 1 wherein the roller surface has a spherical configuration.

7. The method of claim 1 wherein the roller surface further comprises microspheres.

8. The method of claim 1 wherein the roller surface comprises cellulose.

9. The method of claim 1 wherein the microspheres comprise cellulose.

10. The method of claim 1 wherein the binding agent comprises an antibody.

11. The method of claim 1 wherein the step of detecting the bound antigen further comprises a step of washing the bound antigen.

12. The method of claim 1 wherein the step of detecting the bound antigen comprises a chromogenic reaction.

AMENDED CLAIMS

[received by the International Bureau on 12 August 2000 (12.08.00)
original claims 14 and 17 amended; remaining claims unchanged
(1 page)] .

13. The method of claim 1 wherein the step of detecting the bound antigen comprises detection of a fluorophor.

14. A method of detecting an antigen associated with a solid test environment, comprising:

providing a plurality of microbeads, wherein the plurality of microbeads is coupled to a detector surface, and wherein a binding agent that specifically binds at least part of the antigen is coupled to the plurality of microbeads;

repeatedly contacting the solid test environment with the detector surface such that a complex between the binding agent and the antigen is formed; and

detecting the complex on the detector surface.

15. The method of claim 14 wherein the detector surface has a configuration selected from the group consisting of a flat configuration, a cylindrical configuration, and a spherical configuration.

16. The method of claim 14 wherein the detector surface and the microbeads comprise cellulose.

17. The method of claim 14 wherein the solid test environment comprises a liquid.

18. The method of claim 14 wherein the binding agent comprises an antibody.

19. The method of claim 14 wherein the step of detecting further comprises washing the complex.

20. The method of claim 14 wherein the step of detecting further comprises incubation of the complex with a secondary antibody.

21. An apparatus for detecting an antigen proximally associated with a test surface, comprising:

a housing with a handle;

a contactor rotatably coupled to the housing, wherein the contactor comprises a roller surface sized and dimensioned to reciprocally contact at least part of the test surface; and

wherein the roller surface further comprises a binding agent that specifically binds at least part of the antigen.

22. The apparatus of claim 14 wherein the binding agent comprises an antibody.

23. The apparatus of claim 14 further comprising at least one of a light source and a light detector.

24. The apparatus of claim 14 wherein the roller surface has one of a spherical configuration and a cylindrical configuration.